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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR  | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/797,984      | 03/11/2004  | William M. Richardson | 65807-0065          | 4276             |

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| EXAMINER |
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NGUYEN, STEVEN H D

|          |              |
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| ART UNIT | PAPER NUMBER |
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2616

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE  | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS                               | 01/08/2007 | PAPER         |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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|------------------------------|--------------------------------------|--|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/797,984 | <b>Applicant(s)</b><br>RICHARDSON ET AL. |  |
|                              | <b>Examiner</b><br>Steven HD Nguyen  | <b>Art Unit</b><br>2616                  |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 October 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 13-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 13-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Terminal Disclaimer*

1. The terminal disclaimer does not comply with 37 CFR 1.321(b) and/or (c) because:  
The application/patent being disclaimed has been improperly identified since the number used to identify the patent being disclaimed is incorrect. The correct number is 6795402.

### *Double Patenting*

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-2 and 13-23 rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6795402 in view of Keisling (USP 5664105).

As claims 1-2, the claims 1-8 of the patent discloses all the limitation of the claims 1-2 and 13-23 of present application excepting the system processor classifies the signal events as digital communications, noise, interference and/or crosstalk. In the same field of endeavor,

Keisling discloses a system processor classifies the signal events as digital communications, noise, interference and/or crosstalk (Fig 2-3, Fig 3 is a network analysis device which comprises a system processor 26 for downloading data from a digitizer 44 and decoding the signal; Col 2, lines 38-45 wherein frames classified into four types which read on network communications, noise, interference and/or crosstalk). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a method and system for classifying the signal events as digital communications, noise, interference and/or crosstalk as disclosed by Keisling into the teaching of patent. The motivation would have been to improve throughput of the network.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 and 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keisling et al (US Patent 5,664,105) in view of Wash (US Patent 5365509).

Regarding claims 1 and 13-18, Keisling discloses (Figs 1-14 and col. 1, lines 10 to col. 22, lines 12) a network analysis device for a digital data computer network comprising a system processor (fig 3, Ref 26) which downloads data of the sampled signal events from the digitizer (Fig 3, Ref 44), which analyzes the analog characteristics, and which decodes the signal events, which are digital communications between the devices, based on the data and classifies the

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signal events as digital communications, noise, interference and/or crosstalk based on the analog characteristic or parametric analysis of each event (Fig 2-3, Fig 3 is a network analysis device which comprises a system processor 26 for downloading data from a digitizer 44 and decoding the signal; Col 2, lines 38-45 wherein frames classified into four types which read on network communications, noise, interference and/or crosstalk) and determining an unknown source by comparing the known source with unknown source to determine if the unknown source is a ghost frame (col. 5, lines 4-17, using start delimiter to determine if a frame is a ghost frame).

However, Keisling fails to disclose a digitizer for sampling analog signal to digital signal. In the same field of endeavor, Walsh discloses (Figs 1-12 and col. 1, lines 19 to col. 16, lines 5) analog to digital (Fig. 4, 408 and 414) which digitally samples analog characteristics of digital communication events between network device connected to the network; classifying the events as collisions between the network device "late or early collision" by determining a start and stop time; based on the start and stop time to determine a node which creates a collision (Col 12, lines 57 to col. 13, lines 25).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a method and apparatus for digitally sampling the analog characteristic the signals and a tagging circuit for identifying a source and classifying the location of source which creates the collisions based on the start and stop time of collisions as disclosed by Walsh's into Keisling. The motivation would have been to detecting a faulty network device.

6. Claims 19-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keisling (USP 5664105) and Walsh (USP 5365509) as applied to claim 13 above, and further in view of Bhatt et al (USP 4580872).

Regarding claims 19-21, Keisling teaches all the subject matter of the above claim and Walsh discloses tagging sampled signal events to identify the link from which the event originated (Fig 4, Ref 412). However, Keisling and Walsh fail to disclose simultaneously connecting to multiple links of the network; simultaneously connecting to multiple links of a star topology network. In the same field of endeavor, Bhatt discloses (Fig 1-2 and col. 1, lines 8 to col. 5, lines 35) simultaneously connecting to multiple links of the network; simultaneously connecting to multiple links of a star topology network (Fig 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to simultaneously connecting to multiple links of the network; simultaneously connecting to multiple links of a star topology network as disclosed by Batt's system into the system of Keisling and Walsh. The motivation for this implement is enable to test every connection on the network and quickly detect the network problem.

Regarding claim 22, Keisling does not disclose the system processor determines whether the network communications are within frequency and voltage specifications for the network. However, it would have been obvious to one of ordinary skill in the art at the time of the invention as made to recognize that a network analyzer device must have the frequency and voltage within the specifications of the network in order to work and analysis the problem for the network.

Regarding claim 23, Keisling fails to disclose a digitizer for transmitting a signal to detect the response of the network. However, Walsh discloses a digitizer which transmits a pseudo frame onto the network to detect the response of the network (See Abstract).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply a method and apparatus for generating and transmitting a pseudo frame onto network for detecting a response from the network as disclosed by Walsh's system into Keisling's system. The motivation would have been to detect a faulty network station.

#### *Response to Arguments*

7. Applicant's arguments filed 10/25/06 have been fully considered but they are not persuasive.

In response to page 5, the applicant states that Keisling fails to disclose a step of classifies the signal events as network communication, noise, interference and/or crosstalk. In replies Keisling discloses a method and system for classifies the signals events "frames" into local collisions, remote collisions, ghost or other "frame data" wherein noise "ghost", local and remote location "interference or crosstalk".

In response to applicant's argument on pages 7-8 that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art or the nature of the problem to be solved. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958

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F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992) and *In re Rouffet*, 149 F.3d 1350, 47 U.S.P.Q.2d 1453 (Fed. Cir. 1998). In this case, Keisling discloses a method and system for classifying the communication signals into the signals event such as local collisions, remote collisions, ghost or other based on voltage and frequency on the network to classify the signals. Walsh discloses a method and system for analyzing the network signals to classify them into collisions by using AD device to sample the signal into a digital signal. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a method and apparatus for digitally sampling the analog characteristic the signals and a tagging circuit for identifying a source and classifying the location of source which creates the collisions based on the start and stop time of collisions as disclosed by Walsh's into Keisling. The motivation would have been to detecting a faulty network device.

8. In response to applicant's argument on page 8 that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "in light of these .... Failure mode.") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to page 8, the applicant states that Keisling fails to disclose A step of downloading of data arrays of signals events to a system processor and analyzing the data arrays to identify the signal events. In reply, Keisling discloses in Fig 3, a system processor "Ref 26" downloading stored the measurement data in the FPGA "Ref 44" and analyzing the measured data arrays in order to classify the signal event before generating a reporting, Fig 4.



In response to page 9, the applicant states that Keisling fails to disclose a method and system for identifying an unknown source by comparing the determined parameter of known source with the parameters of unknown source. In reply, Keisling discloses a method for identifying an unknown source by determining delimiter of the signal, if a determined delimiter is not valid based on comparing the detect delimiter with a standard delimiter "known sources".

In response to page 9, the applicant states that the examiner must disclose a prior art for determining a communication signal within the voltage and frequency specification for the network. In reply, Patrick (USP 5394401) discloses a method and system for determining a communication signals are within the predetermined voltage and frequency ranges for the network such IEEE 802.5, (See Abstract). since, Patrick discloses a network uses RJ45 etc for coupling the nodes. Therefore, it would have been obvious to one of ordinary skill in the art to apply this teaching into the teaching of Keisling and Walsh in order to identify the type of the network.

### ***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37


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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven HD Nguyen whose telephone number is (571) 272-3159. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (571) 272-3134. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, consisting of a series of loops and a long horizontal stroke extending to the right.

Steven HD Nguyen  
Primary Examiner  
Art Unit 2616